



## NQQ8DR-125

### Dual Power Automatic Transfer Switch

*New Direction*

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#### Product Introduction

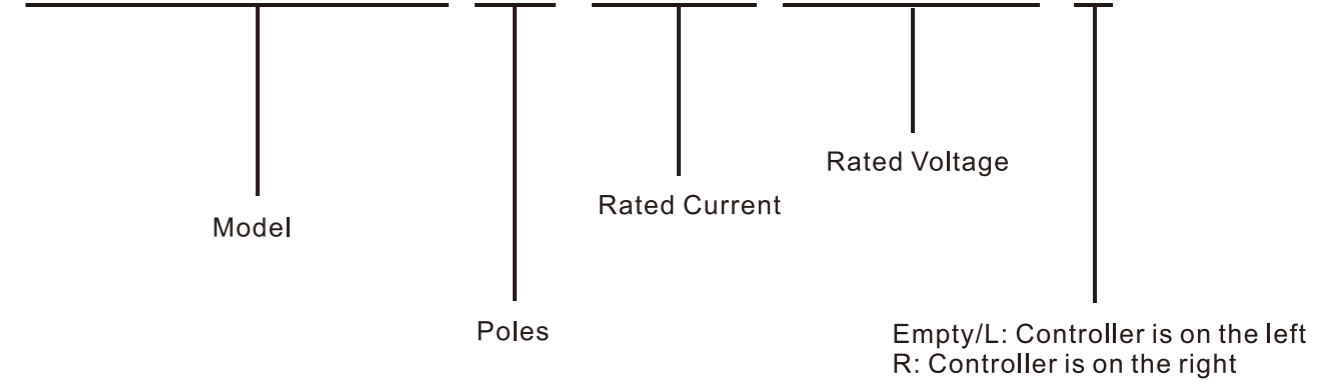
The NQQ8DR-125 dual power automatic transfer switch (ATS) is a newly developed micro, uninterrupted (millisecond switching) household power switch. The switch is mainly used for automatic switching between two power sources. When the main power source is abnormal, the backup power source will immediately start working to ensure the continuity, reliability, and safety of the power supply. This product is specifically designed for domestic rail installation and is specially used for PZ30 and other distribution boxes. The dual power automatic transfer switch is suitable for 50 or 60Hz rated 230V, 400V AC emergency power supply systems. The ATS has the characteristics of a sturdy structure, reliable switching, easy installation and maintenance, and long service life. It is widely used in various situations where power outages cannot be tolerated, and it can work reliably electrically or manually operated. The ATS consists of a TSE and a controller. According to GB/T14048.11, the production of Part 6-1: multifunctional equipment and switch equipment, ATS is a very suitable low-voltage switch equipment and control device.



The product complies with GB/T14048.11 and IEC/EN60947.6.1 standards.

#### Model Meaning

**NQQ8DR-125-2P-125A-AC230V-L**



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### Normal Working Conditions

- Environment air temperature: The maximum temperature should not exceed 40°C, the minimum temperature should not be lower than -5°C, and the average temperature within 24 hours should not exceed 35°C.
- Altitude: The installation location should not be at an altitude higher than 2000m.
- Atmospheric conditions: When the maximum temperature reaches 40°C, the relative humidity at the installation location should not exceed 50%. When the minimum temperature is -5°C, the relative humidity can be relatively high, for example, the temperature is 25°C and the relative humidity is 90%. Due to temperature changes, special measures should be taken to deal with occasional condensation on the surface of the product.
- Pollution degree: The pollution degree of the ATS complies with the level 3 specified in GB/T14046.11.
- Installation category: The ATS should be installed according to the category specified in GB/T14048.11.
- Installation conditions: The ATS can be installed vertically in control cabinets or distribution cabinets.

### Technical Parameters

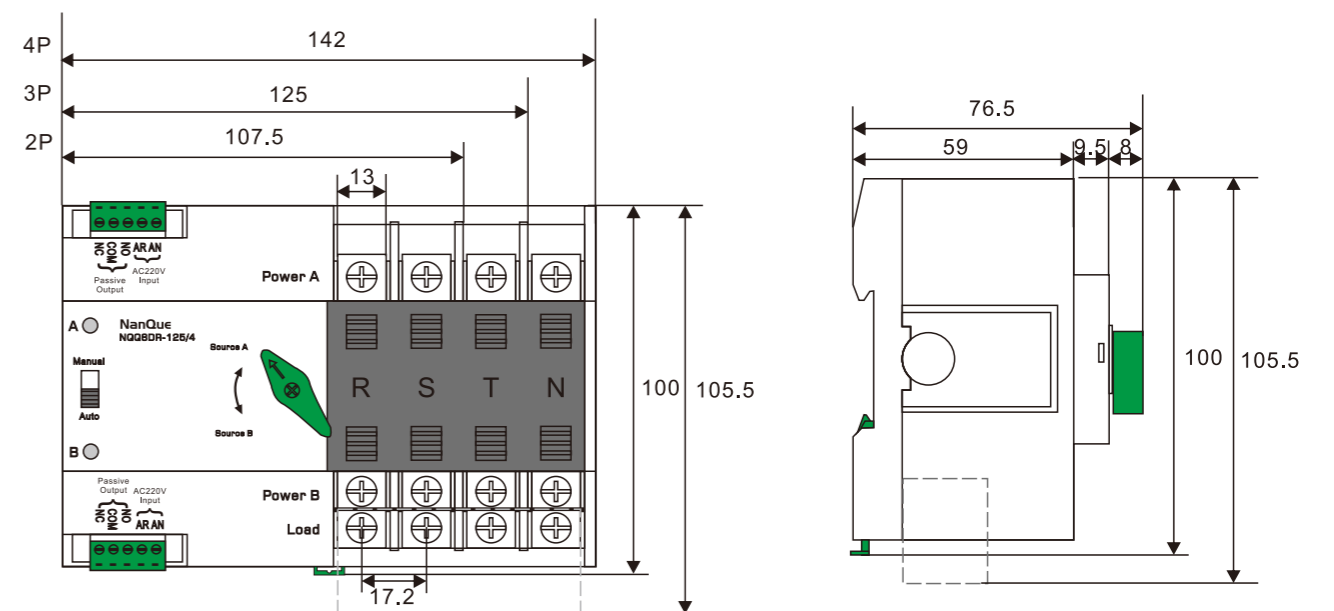
Product Model	NQQ8DR-125
Electrical characteristics	
Poles	2P, 3P, 4P
Rated current Ie (A)	16, 20, 25, 32, 40, 50, 63, 80, 100, 125
Rated voltage Ue (V)	AC110 (2P), AC230 (2P), AC400 (3P, 4P)
Rated insulation voltage Ui (V)	690V
Impulse withstand voltage Uimp (kV)	8
Class	PC, Can be operated manually and maintained for a long time without short circuit
Usage categories	AC-33iB, AC-31B
Rated short charge	50kA
Short circuit	RT16-00-63A
Control circuit	Control voltage: AC220V, 85%Us~110%Us
Auxiliary circuit	Two relays, each with two sets of contact capacities, for contact converters: AC220V 50HZ Ie=Sy
Contact conversion	≤50ms
Operation	≤50ms

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Return conversion	≤50ms
Power off time	≤50ms
Mechanical features	
Electrical life	2000
Mechanical life	5000
Pollution level	2
Installation features	
Terminals	Screw`df`m
Maximum wiring capacity (mm²)	25, 35
Maximum ultimate torque (Nm)	2.5, 3.5
Installation method	Standard 35mm din rail installation

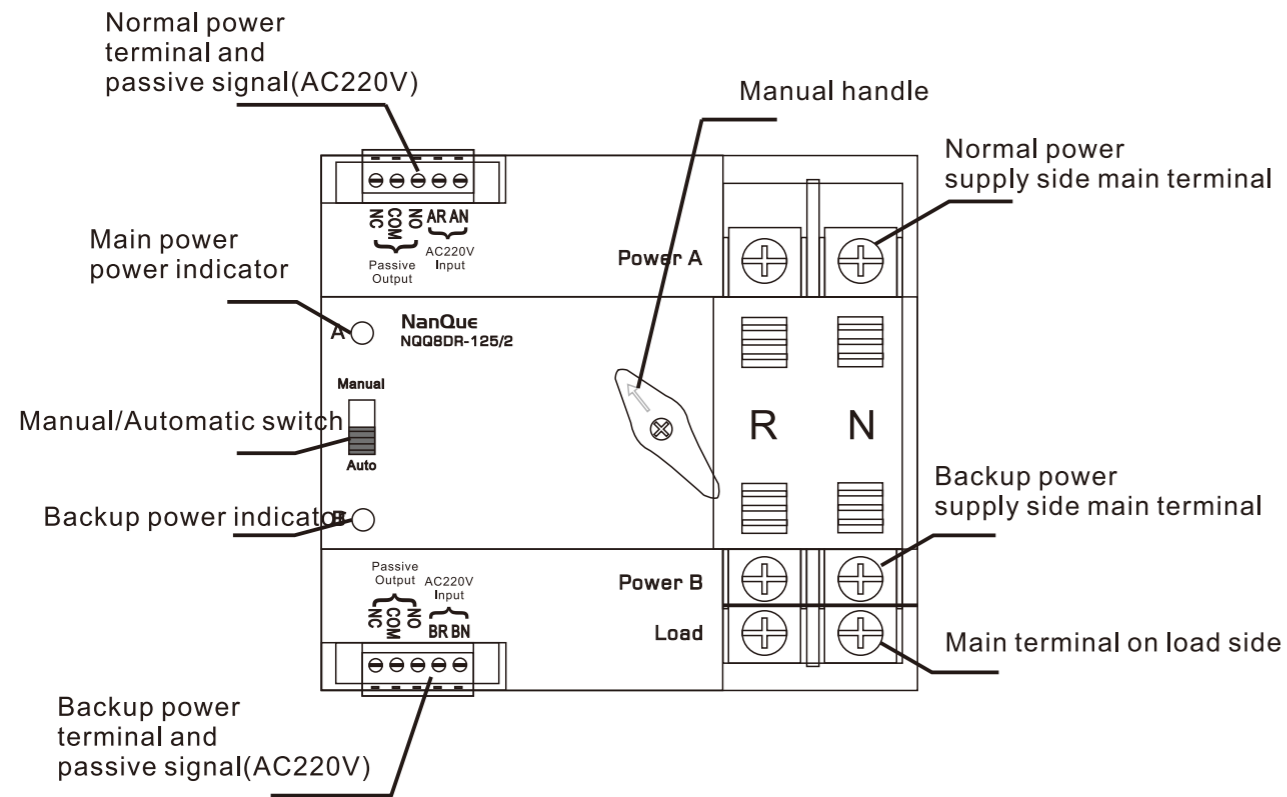
### Product Size



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### Product Description



### Manual switching operation and control

#### 1. Manual/automatic operation

ATS can guarantee the power generation and power outage performance when the circuit is running, but for manual operation, ATS cannot guarantee such performance due to differences in power generation and power outage speeds or operators. Excessive loss of silver alloys may occur during artificial power generation and power outages. Therefore, when inspecting and servicing the operating system and contacts with all power turned off, simply reverse the selector switch to the manual position. Normally, the selector switch will be pulled to the automatic position. After the manual operation is completed, pull the selector switch from the manual position to the automatic position.

#### 2. Control circuit

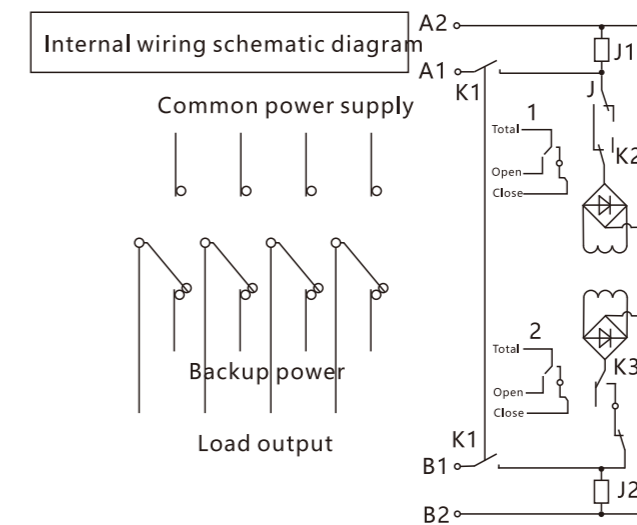
ATS will be activated immediately. After the conversion is completed, the wiring diagram in the control circuit is disconnected by the internal converter. When the rated voltage is 80%-110%, the coil can work normally. If the voltage is too low, the coil will heat up and even spontaneously ignite.

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### Installation and wiring

1. Make sure professionals read the installation manual before installation and wiring.
2. Check the integrity of ATS before installation. Then use the operating handle to open and close the ATS, check the flexibility of the transmission device, and detect the power generation and disconnection of the load at each stage of the normal and backup power supplies.
3. Test control voltage: 50Hz, AC220V.
4. The coil in the control circuit should not be too long. The cutting surface area of copper wire should not be larger than 2.0mm.
5. According to the installation requirements of the power distribution system, please be equipped with appropriate circuit breakers to ensure the safety of personnel and equipment.



### Ordering instructions

1. When ordering, users should indicate the product model, number of poles, and whether the controller is installed on the left or right of the circuit breaker.
2. Example: NQQ8DR-125 2P 63A controller right-mounted, 100 pieces.
3. Users have special requirements, such as customized printing, which can be negotiated separately.

# Appendix I

## Product selection datasheet



2P

3P

4P

Model	Poles	Voltage	Current	Order Code	Customized
NQQ8DR-125	4P	AC400V	40A	NQPD-0806-4PAC4001	YES
Dual Power Switch	4P	AC400V	50A	NQPD-0806-4PAC4001	YES
	4P	AC400V	63A	NQPD-0806-4PAC4001	No
	4P	AC400V	80A	NQPD-0806-4PAC4001	No
	4P	AC400V	100A	NQPD-0806-4PAC4001	No
	4P	AC400V	125A	NQPD-0806-4PAC4001	No

Remark:

- 1, "Customized products" (gray marked), cannot be ordered directly, you need to determine the quantity, price and order cycle before ordering,
- 2, Customized products does not support returns and exchanges.

Model	Poles	Voltage	Current	Order Code	Customized
NQQ8DR-125	2P	AC230V	16A	NQPD-0806-2PAC2001	Yes
Dual Power Switch	2P	AC230V	20A	NQPD-0806-2PAC2001	Yes
	2P	AC230V	25A	NQPD-0806-2PAC2001	Yes
	2P	AC230V	32A	NQPD-0806-2PAC2001	Yes
	2P	AC230V	40A	NQPD-0806-2PAC2001	Yes
	2P	AC230V	50A	NQPD-0806-2PAC2001	Yes
	2P	AC230V	63A	NQPD-0806-2PAC2001	No
	2P	AC230V	80A	NQPD-0806-2PAC2001	No
	2P	AC230V	100A	NQPD-0806-2PAC2001	No
	2P	AC230V	125A	NQPD-0806-2PAC2001	No
	3P	AC400V	16A	NQPD-0806-3PAC4001	Yes
	3P	AC400V	20A	NQPD-0806-3PAC4001	Yes
	3P	AC400V	25A	NQPD-0806-3PAC4001	Yes
	3P	AC400V	32A	NQPD-0806-3PAC4001	Yes
	3P	AC400V	40A	NQPD-0806-3PAC4001	Yes
	3P	AC400V	50A	NQPD-0806-3PAC4001	Yes
	3P	AC400V	63A	NQPD-0806-3PAC4001	No
	3P	AC400V	80A	NQPD-0806-3PAC4001	No
	3P	AC400V	100A	NQPD-0806-3PAC4001	No
	3P	AC400V	125A	NQPD-0806-3PAC4001	No
	4P	AC400V	16A	NQPD-0806-4PAC4001	YES
	4P	AC400V	20A	NQPD-0806-4PAC4001	YES
	4P	AC400V	25A	NQPD-0806-4PAC4001	YES
	4P	AC400V	32A	NQPD-0806-4PAC4001	YES